

REMARKS

Claims 1-3, 5, 11, 13-19, and 26-32 are currently pending in the subject application and are presently under consideration. Claims 1, 2, 5, 11, 13-14, and 16-19 have been amended as shown on pp. 2-5 of the Reply. Such amendments encompass amendments that have not been previously entered and new amendments to claims 13 and 26 presented herein for further consideration.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Objections to Claims 1 and 5

Claims 1 and 5 are objected to for informalities. Claims 1 and 5 have been previously amended in Reply to Final Office Action dated July 10, 2008, as suggested by Examiner, but these amendments have not been entered. Accordingly, entry of the pending amendments, withdrawal of the objections to claims 1 and 5, and allowance of these claims are respectfully requested.

II. Rejection of Claims 1-5, 9-11, and 13-20 Under 35 U.S.C. § 101

Claims 1-5, 9-11, and 13-20 stand rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter. Specifically with regard to independent claims 1 and 13 (and associated dependent claims), it is contended that the claims define software *per se*.

Regarding amendments to independent claim 26, the Federal Circuit has established in *In re Bilski*, __ F.3d __ (Fed. Cir. 2008)(*en banc*) Slip op. at 10 that inventions such as that claimed by applicants are statutory.

"A claimed process is surely patent-eligible subject matter under § 101 if: (1) it is tied to a *particular machine or apparatus*, or (2) it *transforms a particular article into a different state or thing*." *In re Bilski*, __ F.3d __ (Fed. Cir. 2008)(*en banc*) Slip op. at 10. "[T]he electronic transformation of the data itself . . . was sufficient; the claim was not required to involve any transformation of the underlying physical object that the data

represented.” Id. Slip op. at 26. (discussing the transformation of that raw X-ray attenuation data into a particular visual depiction of a physical object on a display), *citing In re Abele*, 684 F.2d 902 (CCPA 1982) (emphasis added). “We believe this is faithful to the concern the Supreme Court articulated as the basis for the machine-or-transformation test, namely the prevention of pre-emption of fundamental principles.” *Bilski*, __ F.3d __ Slip op. at 26.

Applicants’ representative respectfully submits that the requirements necessary to fulfill the conditions for patentability under 35 U.S.C. § 101 are satisfied. The Federal Circuit in *In re Bilski* established that a process is patent-eligible if it *transforms a particular article into a different state or thing*. In addition, the Federal Circuit allowed that *electronic transformation of the data itself is sufficient* and that *the claim was not required to involve any transformation of the underlying physical object that the data represented*. Moreover, a process that is tied to a *particular machine or apparatus* is also patentable subject matter under 35 U.S.C. § 101.

A “general purpose computer programmed to carry out a particular algorithm creates a ‘new machine’ because *a general purpose computer ‘in effect becomes a special purpose computer once it is programmed to perform particular functions pursuant to instructions from program software.’” *WMS Gaming, Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1348 (Fed. Cir. 1999) (discussing the construction of a 35 U.S.C. § 112, paragraph 6 limitation) (emphasis added) . “The instructions of the software program in effect ‘create a special purpose machine for carrying out the particular algorithm.’” *WMS Gaming*, 184 F.3d at 1348.*

“Although many, or arguably even all, . . . elements recited in claim 15 . . . perform mathematical calculations, . . . *the claimed invention as a whole is directed to a combination of interrelated elements which combine to form a machine for . . . [performing the recited mathematical calculations].*” *In re Alappat*, 33 F.3d 1526, 1544 (Fed. Cir. 1994). “*This is not a disembodied mathematical concept* which may be characterized as an ‘abstract idea,’ *but rather a specific machine* to produce a useful, concrete, and tangible result” *Id.* “Indeed, *claim 15 as written is not ‘so abstract and sweeping’ that it would ‘wholly pre-empt’ the use of any apparatus employing the combination of mathematical calculations recited therein.*” *Id.*, *citing Gottschalk v. Benson*, 409

U.S. 63, 68-72 S.Ct. 253, 255-258 (1972). In any case, a computer, like a rasterizer, is [an] apparatus not mathematics. *Id.* at 1545.

However, while the Federal Circuit in *Bilski* disavows the *In re Alappat* “useful, concrete, and tangible result” test as insufficient to determine whether a claim is patent-eligible under 35 U.S.C. § 101, slip opinion at 20, the Federal Circuit left open the question whether or when recitation of a computer suffices to tie a process claim to a particular machine, slip opinion at 24. According to *WMS Gaming, Inc. v. International Game Technology* and *In re Alappat*, instructions of a software program in effect *create a special purpose machine, or a specific machine, for carrying out a particular algorithm*. The subject claims clearly satisfy the legal standards set forth in *In re Bilski*, *WMS Gaming, Inc. v. International Game Technology*, and *In re Alappat*.

Regarding independent claim 26, the claim recites a method for controlling a computer. For example, the claim as amended herein recites: *receiving at least one of input device data and clipboard data associated with a first agent of a first computing system programmed to receive and switch the at least one of input device data and clipboard data and route the clipboard data in response to a routing signal*. Processes are by themselves statutory subject matter. In addition, it is respectfully submitted that *the first computing system* as claimed sufficiently creates a special purpose machine, or a specific machine, for carrying out a particular algorithm. Thus, according to the standard set forth above, it is believed that independent claim 26 (and associated dependent claims) are in condition for allowance.

When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. *See, e.g.*, MPEP § 2106.01 [R-6]; *see also in re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031,1035 (Fed. Cir. 1994) (noting on appeal from the Board of Patent Appeals and Interferences that the Board found that claims directed to a memory containing stored information, as a whole, recited a statutory article of manufacture).

Regarding independent claims 1 and 13, it should be reasonably understood by one skilled in the art that a system referring to components that perform actions (*e.g.*, receives local

input device data, routes the local input device data, communicates with the agent to facilitate control of the second computing system, *etc.*) cannot be implemented by a software program alone. Accordingly, independent claims 1 and 13 are inherently directed to a computer-related entities capable of performing the recited actions. *See, e.g., p. 7, ll. 1-8, etc.*

For the avoidance of doubt, claims 1 and 13, as well as associated dependent claims, have been previously amended to indicate that the systems are computer-implemented systems. In response to these amendments, it was contended that it is possible for the corresponding disclosed "component" to cover an embodiment of software alone. To further remove doubt, the subject claims have been amended herein to recite computer executable components or agents and processors to execute the components or agents, which clearly recite a combination of hardware and software. In addition, independent claim 13 has been further amended to recite that the *computer executable agent [is] programmed on the first computing system*. It should be appreciated that a computing system at least inherently comprises a computer-readable medium in order to facilitate programming it and/or execution of computer executable components. By the standards set forth in the above decision, a computer implemented system, a computer implemented system, in the form of software in execution, hardware, or any combination thereof clearly falls within the categories of statutory subject matter. Thus, independent claims 1 and 13 (as well as associated independent claims) are believed to be allowable for at least these reasons.

Reconsideration and withdrawal of the rejection of independent claims 1 and 13 (and associated dependent claims) under 35 U.S.C. § 101 is respectfully requested in view of the foregoing comments.

III. Rejection of Claims 1-3, 5, 13-17, and 19 Under 35 U.S.C. § 103(a)

Claims 1-3, 5, 13-17, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Panasyuk *et al.*, U.S. Patent 6,437,803 (hereinafter, "Panasyuk"), in view of Kawamura *et al.*, U.S. Patent 6,662,207 (hereinafter, "Kawamura"). Claims 1 and 13 are independent claims. Reconsideration and withdrawal of the rejection is respectfully requested, at least because Panasyuk alone, or in combination with Kawamura, does not explicitly or inherently disclose each and every limitation of applicants' claimed invention, nor does the combination render applicants' claimed invention obvious.

To reject claims in an application under § 103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some apparent reason to combine the known elements in the fashion claimed by the patent at issue (e.g., in the references themselves, interrelated teachings of multiple patents, the effects of demands known to the design community or present in the marketplace, or in the knowledge generally available to one of ordinary skill in the art. To facilitate review, this analysis should be made explicit. Second, there must be a reasonable expectation of success. *Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.* See MPEP § 706.02(j). See also *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. ___, 04-1350, slip op. at 14 (2007). The reasonable expectation of success must be found in the prior art and not based on applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

The disclosed subject matter relates to a framework for providing user interaction with one or more other networked computing devices through a first computing device. To that end, the disclosed subject matter provides an agent component that facilitates manual and automatic configuration of networked computer devices such that each of the networked computing devices input and output devices interact with one another in a prescribed manner. Accordingly, the disclosed subject matter provides an agent component resident on a local computing system to facilitate switching of the local input device signals to a remote computing system such that the agent of the remote computing system allows the local input device(s) to control the remote computing system.

In an aspect of the disclosed subject matter, remote input devices can also be used to control the remote computing system at the same time as the local computing devices. For example, when a user manually signals the remote computing system that local input device control is to be switched back to the local computing system, the remote computing system signals the remote agent, the remote agent signals the local agent, and the local agent switches the local input device signals to the local computing device inputs.

In a further aspect, the disclosed subject matter facilitates routing clipboard data of a first system clipboard to a second system in response to a routing signal. In another aspect, a first agent of a first computing system facilitates copying of clipboard data from the first computing

system to the second computing system by encapsulating the clipboard data and transmitting the encapsulated clipboard data to a second agent of the second computing system, which second agent verifies that the clipboard data can be copied to the second computing system.

In another aspect, the disclosed subject matter can facilitate remote control by the local computing system, for example, only if the remote computing system has been properly authenticated as a member of a group of systems authorized to take part in such an exchange, which can be done manually or automatically. In the manual instance, when the remote system is brought into a geographical area of the local system, the remote system is connected to the network, and manually configured in accordance with a network database to be a member of the group such that remote control can be performed. In the automatic aspect, when the remote system is brought into the area of the local system, the remote system automatically authenticates to the network. The network further authenticates the remote system against the network database of authorized members of the group, and then allows the local and remote agents to communicate to facilitate the control aspects of the present invention.

In contrast, Panasyuk merely describes incorporating windows from remote desktop environments into a local desktop environment *via* a local node, a local agent, a first remote node, and a first remote agent. *See, e.g.*, col. 1, ll. 59-63. To that end, Panasyuk describes a first remote node that provides a first remote desktop environment, and a first remote agent that monitors the first remote desktop environment for changes in the environment. *See, e.g.*, col. 1, ll. 63-66. Panasyuk further describes that the first remote node transmits messages to a local agent indicative of changes in the first remote desktop environment. *See, e.g.*, col. 1, l. 66 to col. 2, l. 1. The local agent then receives the transmitted messages and commands the local node to modify a representation of a first remote window that is part of a local desktop environment. *See, e.g.*, col. 2, ll. 1-4. However, Panasyuk fails disclose aspects of applicants' claimed invention.

In response to this summation of Panasyuk, it is contended that Panasyuk discloses "commands input to the remote desktop displayed on the local desktop are echoed to the actual remote desktop as if input locally on the remote desktop." *See, e.g.*, Official Action dated July 10, 2008, numbered p. 3, item 3.1. It is further contended that "[a]ny command input into a desktop window performs an action such as editing a document; or initiation of execution of a program." *Id.* Accordingly, it is concluded that "[t]he commands input on the local desktop and

echoed on the remote desktop are actions (such as commands) actually performed on the remote desktop system.” *Id.*

However, applicants’ representative respectfully submits that such an interpretation of Panasyuk either mischaracterizes or obscures the disclosed operation of Panasyuk as disclosed therein and as described above. In contrast to commands being echoed from a local to remote desktop as is contended, it is clear that Panasyuk discloses “monitoring, by the local agent, the local desktop; and transmitting, by the local node, messages to the remote node indicative of a change in the local desktop environment.” *See, e.g., col. 2, ll. 16-18.* Panasyuk further describes that “[t]he agent includes a message receiving process capable of receiving messages indicating a change has occurred in a remote desktop environment. . . .” and a “command process effects changes to the local desktop environment responsive to messages received by the message receiving process.” *See, e.g., col. 2, ll. 22-27.*

Accordingly, Panasyuk merely describes sending messages to the remote agent such that local changes to the incorporated windows of the local desktop environment are reflected in the remote desktop environment. Panasyuk further describes that the content of such messages merely refer to graphical information such as how the respective desktop environments are to be displayed. For example, Panasyuk describes that “the nodes exchange desktop information such as window position, window size, and Bordering of desktop windows, over the first virtual channel. . . . [and] exchange graphical information over the second virtual channel.” *See, e.g., col. 2, ll. 36-39.* Thus, in clear contrast to the contention that commands are echoed from a local system to a remote system, Panasyuk’s graphical information message transmission system fails to disclose aspects of applicants’ claimed invention.

For example, regarding independent claim 1 of record, the claim recites: *the local agent of the local system is communicatively coupled to an associations database comprising associations information between a user, the local system, and the remote system such that the local system automatically facilitates control of the remote system by the user via the local agent upon deployment of the remote system proximate to the local system.* Column 1, lines 54-61 were previously cited for support that Panasyuk discloses this aspect of applicants’ claimed invention. However, at the indicated portions, Panasyuk merely describes that the system allows a user to interact with displayed windows without knowledge of the source of those windows, and changes to the window, either locally or remotely, are reflected in the

corresponding display on the server or client.

Panasyuk fails to explicitly or inherently disclose these aspects of applicants' claimed invention. For instance, while Panasyuk describes two agents in communication without knowledge of the source of those windows, Panasyuk fails to disclose *the local agent of the local system is communicatively coupled to an associations database . . . such that the local system automatically facilitates control of the remote system by the user via the local agent upon deployment of the remote system proximate to the local system* as recited in independent claim 1 of record. As amended herein, Panasyuk further fails to disclose *the computer executable local agent of the local system is communicatively coupled to an associations database . . . such that the local system control of the remote system by the user via the computer executable local agent is performed automatically upon deployment of the remote system proximate to the local system*.

In the instant action, it is conceded that Panasyuk fails to disclose that the local agent is communicatively coupled to an associations database comprising associations information between a user, the local system, and the remote system as claimed. *See* Official Action dated July 10, 2008 at numbered p. 6. Thus, Kawamura is offered to support the contention that Kawamura provides these missing aspects. As a result, it is contended that the combination of Panasyuk and Kawamura discloses these aspects of applicants' claimed invention. For example, column 6, line 65 to column 7, line 6 are cited to support the contentions that Kawamura discloses "information stored in agent profile (agent attributes)". *See, e.g.*, Official Action dated July 10, 2008, numbered pp. 6-7. Column 32, lines 23-31 are cited to support the contentions that Kawamura discloses "information with regard to whether individual platforms are capable of accepting and activating an agent." *Id.*

Thus, it is concluded that the platform profile and agent profile "can be stored in a centralized or distributed manner (agent profile for each agent is part of each agent or in a central store)". *Id.* On this basis, it is further contended that Kawamura discloses *the local agent of the local system is communicatively coupled to an associations database comprising associations information between a user, the local system, and the remote system* as recited in independent claim 1 of record.

Applicants' representative respectfully disagrees and submits that Kawamura fails to explicitly or inherently disclose aspects for which it is cited, and thus cannot be said to disclose

this feature of applicants' claimed invention as recited in the claims of record and as amended herein. In addition, Kawamura fails to cure the deficiencies of the root reference Panasyuk.

In contrast to applicants' claimed invention, Kawamura relates to processing information existing in a distributed manner in a network, such as agent-oriented information processing technologies that adapt to changes in situations. To that end, Kawamura describes "*making a decision*, when it becomes necessary for an agent currently located at a platform to make use of another platform, *with regard to whether to cause the agent to move to the other platform or cause the agent to cooperate with another agent that exists at the other platform.*" See, e.g., Abstract (emphasis added). Kawamura further describes that the "decision of using either movement or cooperation is typically made based on platform information and agent information." *Id.*

Thus, Kawamura merely describes a moveable agent and the decision process and factors to be considered as to whether the agent moves to another platform or cooperates with another agent at another platform. At the indicated portions, Kawamura merely describes judgment criterion to be used "with regard to whether to cause the agent to move to the other platform or cause the agent to cooperate with another agent that exists at the other platform." See, e.g., col. 6, l. 61 to col. 7 l. 7. Such judgment criterion are described as "information stored in *agent profile*, such as agent attributes with regard to whether or not the individual agents have the ability to move between platforms", ". . . information stored in *platform profiles*, which typically includes information with regard to whether individual platforms are capable of accepting and activating an agent. . . .", "information with regard to the *reliability of the network circuits* that connect the platforms. . . .", and "*whether a file for movement or cooperation having a characteristic file name exists at the target platform.*" *Id.* (emphasis added).

In addition, column 32, lines 23-31 merely illustrates the operation of Kawamura with regard to determining the reliability of the communication circuits and whether the agent and the node support mobility. It should be noted that when Kawamura refers to the term "agent user", Kawamura is referring to an agent named "user" rather than a user of an agent. For example, at column 17, lines 14-21, Kawamura exemplifies the process of creating an agent, which "is created with the name 'user',", and "registering the name 'user' in a list for the purpose of agent management. . . ." Thus, the term "user" in referring to "agent user" should not be misconstrued in support of the contention that Kawamura describes *the local agent of the local*

system is communicatively coupled to an associations database comprising associations information between a user, the local system, and the remote system as recited in independent claim 1 of record. Moreover, Kawamura is silent regarding associations information of the user, and thus, Kawamura cannot be said to disclose an *associations database comprising associations information between a user, the local system, and the remote system*. Thus, independent claim 1 of record and as amended herein (as well as associated dependent claims) are believed to be allowable for at least this reason.

Applicants' representative further submits that the combination of Panasyuk with Kawamura fails to explicitly or inherently disclose aspects applicants' claimed invention. For instance, independent claim 1 of record recites: *the local agent of the local system is communicatively coupled to an associations database . . . such that the local system automatically facilitates control of the remote system by the user via the local agent upon deployment of the remote system proximate to the local system* as recited in independent claim 1 of record. As amended herein, the claim recites *the computer executable local agent of the local system is communicatively coupled to an associations database . . . such that the local system control of the remote system by the user via the computer executable local agent is performed automatically upon deployment of the remote system proximate to the local system*. Neither Panasyuk nor Kawamura disclose this feature of applicants' claimed invention. Indeed, Both Panasyuk and Kawamura are silent regarding automatic *system control of the remote system . . . upon deployment of the remote system proximate to the local system*. Thus, it is respectfully submitted that the combination of Panasyuk and Kawamura fails to disclose these aspects of applicants' claimed invention. Accordingly, independent claim 1 of record and as amended herein (as well as associated dependent claims) are believed to be allowable for at least this additional reason.

Regarding independent claim 13, the claim of record recites: *the first computing system transmits update information from the first computing system to a database disposed at least one of on a network and with the first computing system such that deployment of the second computing system on the network triggers automatic update of the second computing system with the update information*. Column 6, lines 25-29 and 54-57 have been previously cited for support that Panasyuk discloses this aspect of applicants' claimed invention. However, at the indicated portions, Panasyuk merely describes a communication process whereby the Panasyuk

client agent (the first system as indicated in p.7 of Official Action dated February 6, 2008) resets its internal data structures upon establishment of the seamless windowing mode with the Panasyuk server agent (the second system as indicated in p.7 of Official Action dated February 6, 2008). Thus, Panasyuk fails to explicitly or inherently disclose *the first computing system transmits update information from the first computing system to a database . . . such that deployment of the second computing system on the network triggers automatic update of the second computing system with the update information* as applicants claim 13 of record recites.

In the instant action, it is conceded that Panasyuk fails to disclose that the local agent is communicatively coupled to an associations database comprising associations information between a user, the local system, and the remote system as claimed in independent claim 1 of record. *See* Official Action dated July 10, 2008 at numbered p. 6. However, no further arguments or citations to art references are made to support the proposition that this aspect of applicants' claimed invention is obvious. However, column 1, lines 61-63 and column 2, lines 4-7 of Panasyuk are cited to support the contentions that the Panasyuk description of a local agent monitoring a local desktop and transmitting local input (that is - changes to local desktop environment) to a remote agent discloses the first and second agent as applicants claim in independent claim 13 of record. *See, e.g.,* Official Action dated July 10, 2008, numbered p. 9.

However, as discussed above, Panasyuk describes that the first remote node transmits messages to a local agent indicative of changes in the first remote desktop environment. *See, e.g.,* col. 1, l. 66 to col. 2, l. 1. Accordingly, Panasyuk merely describes sending messages to the remote agent such that local changes to the incorporated windows of the remote desktop environment are reflected in the remote desktop environment. Thus, Panasyuk cannot be said to disclose the first and second agent as claimed in independent claim 13 of record or as amended herein. Accordingly, independent claim 13 of record and as amended herein (as well as associated dependent claims) are believed to be allowable for at least this reason.

In addition, while no additional arguments or citations to references are provided to support that contention that claim 13 is obvious, it is respectfully submitted that Kawamura fails to cure the deficiencies of the root reference Panasyuk. In addition, it is further submitted that Kawamura cannot be said to disclose *the first computing system transmits update information from the first computing system to a database disposed at least one of on a network and with the first computing system such that deployment of the second computing system on the*

network triggers automatic update of the second computing system with the update information, as recited in independent claim 13, for at least the reasons set forth above regarding independent claim 1. Accordingly, independent claim 13 of record and as amended herein (as well as associated dependent claims) are believed to be allowable for at least this additional reason.

Reconsideration and withdrawal of the rejection of independent claims 1 and 13 (as well as associated dependent claims) under 35 U.S.C. § 103(a) is respectfully requested, at least, in view of the comments above.

IV. Rejection of Claim 11 Under 35 U.S.C. § 103(a)

Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Panasyuk in view of Kawamura and further in view of Deshpande, U.S. Patent 7,171,444. Claim 11 depends directly from independent claim 1. Without conceding the propriety of the combination, reconsideration and withdrawal of the rejection is respectfully requested, at least because Deshpande alone, or in any combination with Panasyuk and Kawamura does not disclose each and every limitation of applicants' claimed invention, nor does the combination render applicants' claimed invention obvious.

It has been conceded that Panasyuk does not disclose *emulation of a touch pad interface on the local system to control the remote system*, as recited in dependent claim 11. Thus, Deshpande is relied upon to provide this missing aspect of applicants' claimed invention. However, Deshpande merely describes a touch screen as input to a thin client system and does not disclose *the local agent component emulation of a touch pad interface on the local system to control the remote system*.

In response to these arguments, column 1, lines 23-27 are cited to support the contentions that Deshpande discloses a touch screen or equivalent touch pad interface, and that this describes or renders obvious the recited limitation of claim 1 of record, *the local agent component facilitates emulation of a touch pad interface on the local system to control the remote system*. Applicants' representative respectfully disagrees. The indicated portions of Deshpande merely describe that a touch screen can be an input to a thin client system. For example, Deshpande describes that, “[d]epending on what function the thin client serves, these devices could be combined into a single device, such as a touch screen, or may all be separate.” See, e.g., col. 2,

II. 25-27. Deshpande is otherwise silent regarding a touch screen interface with regard to *the local agent component facilitates emulation of a touch pad interface on the local system to control the remote system.*

Thus, Deshpande merely stands for the proposition that a touch screen may be used as an input device. Accordingly, assuming *arguendo* that Panasyuk could be said to disclose “the local agent component facilitates an interface on the local system to control the remote system”, it is respectfully submitted that Deshpande cannot be said to explicitly or inherently describe *the local agent component facilitates emulation of a touch pad interface* as applicants claim.

Deshpande relates to data transmission using data compression techniques in a communication link between a server and a thin computer client is silent regarding local. As a result, Deshpande is silent regarding a local agent facilitating an interface. Thus, dependent claim 11 of record and as amended herein are believed to be allowable for at least this reason.

In addition, Deshpande fails to cure the deficiencies of the root references, Panasyuk and Kawamura, as described above regarding independent claim 1. Thus, dependent claim 11 of record and as amended herein are believed to be allowable for at least this additional reason.

Regarding the cited motivation to combine Deshpande with Panasyuk and Kawamura, it is contended that one of ordinary skill in the art “would have been motivated to employ the teachings of Deshpande in order to provide adequate playback by eliminating bandwidth constraints.” *See, e.g.*, Official Action dated July 10, 2008, numbered p. 12. To support this contention, Deshpande column 2, lines 42-47 is cited to provide this motivating factor. *Id.* (quoting Deshpande, “. . . Many thin client systems fail to achieve adequate playback due to the bandwidth constraints and the way in which that bandwidth is used. The present invention addresses this and other problems associated with the prior art. . . .”).

Applicants representative respectfully disagrees and submits that such a motivation cannot properly be said to motivate one skilled in the art to combine the cited references to arrive at the combination alleged to render obvious applicants’ claimed invention. For example, the cited passage merely describes problems facing Deshpande, in that the state of the art, at the time of Deshpande, remote desktop communication protocols had problems with “slow screen updates, dropouts, artifacts or other problems that distract the viewer.” *See, e.g.*, col. 2, II. 42-47. Thus, the described problems indicate a need for efficient utilization of bandwidth, and thus for the solution of Deshpande to accomplish data transmission using compression. It is respectfully

submitted that such a motivating factor is inapposite to applicants' claimed invention in addition to the failure of the combination to explicitly or inherently disclose aspects of applicants' claimed invention. In other words, merely citing inadequate playback and bandwidth constraints in the context of remote desktop protocols cannot be said to motivate the combination of Deshpande with Panasyuk and Kawamura to arrive at applicants' claimed invention, especially given the deficiencies in such references as described above. Thus, dependent claim 11 of record and as amended herein are believed to be allowable for at least this additional reason.

Reconsideration and withdrawal of the rejection of dependent claim 11 under 35 U.S.C. § 103(a) is respectfully requested, at least, in view of the comments above.

V. **Rejection of Claims 18 and 32 Under 35 U.S.C. § 103(a)**

Claims 18 and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Panasyuk in view of Kawamura and further in view of Beged-Dov *et al.*, U.S. Patent 6,983,328 (hereinafter, "Beged-Dov"). Claim 26 is the pending independent claim. Without conceding the propriety of the combination, reconsideration and withdrawal of the rejection is respectfully requested, at least because Beged-Dov alone, or in any combination with Panasyuk and Kawamura does not disclose each and every limitation of applicants' claimed invention, nor does the combination render applicants' claimed invention obvious.

Regarding independent claim 18 of record, Examiner concedes that Panasyuk does not disclose "copying of clipboard data from the first computing system to the second computing system." *See, e.g.*, Official Action dated July 10, 2008, numbered p. 12. Similarly, regarding independent claim 32 of record, Examiner concedes that Panasyuk does not disclose "automatically routing clipboard content from the first system to the at least a second system, the second system including a second agent that verifies that the clipboard content can be received at the second system." *Id.* at numbered p. 15. Thus, Beged-Dov is relied upon to provide these missing aspects. However, Beged-Dov fails to cure the deficiencies of the root references Panasyuk and Kawamura as described above regarding independent claim 13 in addition to failing to disclose that which it is cited for.

For example, column 3, line 63 to column 4, line 2, column 4, lines 30-50, and column 5, lines 17-18 and 36-49 are cited for support that Beged-Dov discloses such as aspects as claimed in claims 18 and 32 of record. In contrast, Beged-Dov merely describes transfer of resource(s)

from a source web service to a destination web service *via* an intermediary trusted internet clipboard service by intercepting download and upload actions of a user in a web interface. See, e.g., Abstract, Summary, Figure 1, etc. For example, Beged-Dov describes a method including intercepting a user's request, capturing information retrieved for the request, editing the recorded messages, and replaying the messages on an Internet clipboard server to effect the resource transfer.

However, Beged-Dov fails to explicitly or inherently disclose the claimed aspects of applicants' invention. For example, column 3, line 63 to column 4, line 2 is cited for support that Beged-Dov describes discloses "copying of clipboard data from the first computing system to the second computing system." However, as recited in claim 18 of record as well as claim 18 as amended herein, the first system corresponds to the first agent, whereas the second system receives the clipboard data *via* the second agent, which second agent verifies that the clipboard data can be copied to the second computing system. By requiring the clipboard data to be transferred to the internet clipboard service, Beged-Dov can be reasonably read as teaching away from first agent facilitating copying of clipboard data from the first computing system to the second computing system by encapsulating the clipboard data and transmitting the encapsulated clipboard data as recited in claim 18 of record. For instance, while Beged-Dov requires log on and/or log off of associated source and destination web services, initiating and stopping copy functions, and so on, applicants' claimed invention clearly refers to the local system's (first system's) system clipboard.

For example, dependent claim 18 of record recites: first agent facilitates copying of *clipboard data from the first computing system*. Similarly, independent claim 32 recites: *routing the input device data to the at least a second system*, where *input device data of one or more input devices of the first system* is from the first system. Thus, by describing the use of the complex and inefficient intermediary process, Beged-Dov teaches away from using the local system clipboard to transfer clipboard data as applicants claim. Accordingly, applicants' representative respectfully submits that by teaching away from the applicants' claim system Beged-Dov cannot be said to provide the motivation to combine Beged-Dov with Panasyuk. Moreover, by specifying an internet intermediary "clipboard" process, Beged-Dov cannot be said to disclose the specific limitations as claimed by applicants in claims 18 and 32 (as well as associated dependent claims).

In response to these arguments, it is contended that Beged-Dov discloses the routing of clipboard data between network-connected systems *via* an internet clipboard service that is an intermediate transfer system, and user authentication before access to clipboard data transfers. *See, e.g.*, Official Action dated July 10, 2008, numbered p. 4, item 3.3. Thus, it is contended that “[t]here is nothing in the claimed invention that discourages or discredits the usage of an intermediate system.” *Id.* Accordingly, it is concluded that “Beged-Dov does not teach away from the routing of clipboard data between network connected systems.” To support this conclusion, it is contended that the final result is the transfer of clipboard data between two network connected systems as per the claimed invention. *Id.* Column 3, line 63 to column 4, line 2, column 4, lines 30-50, and column 5, lines 17-18 and 36-49 are again cited for support that “Beged-Dov also discloses authentication of the user before usage of the network capable clipboard service.” *Id.*

Applicants’ representative disagrees with such conclusions and submits that Beged-Dov fails to disclose these aspects of applicants’ claimed invention in addition to teaching away from applicants’ claimed invention. Examiner has acknowledged that Beged-Dov discloses the routing of clipboard data between network-connected systems *via* an internet clipboard service that is an *intermediate transfer system*, and user authentication before access to clipboard data transfers. However, this concession ignores the Beged-Dov disclosure that the authentication takes place *at the intermediate transfer system*. For example, Beged-Dov describes that “the End-User (102) optionally (if required to do so) logs in and authenticates himself to the Source Web Service (124) to establish a user session, *e.g.* by entering a unique identifier and password.” *See, e.g.*, col. 4, ll. 30-33. In addition, Beged-Dov describes that “[i]n steps 221-223 the End-User (102) logs in and authenticates himself to the Destination Web Service (122).” *See, e.g.*, col. 5, ll. 17-18. Thus, Beged-Dov describes such authentication as occurring at the *intermediate transfer system*.

In clear contrast and in contravention with the conclusion that “[t]here is nothing in the claimed invention that discourages or discredits the usage of an intermediate system. . . .”, such as Beged-Dov describes, claims 18 and 32 of record and as amended herein clearly describe interactions between first and second agents of respective first and second computing systems, where a second agent verifies that the clipboard data or content can be copied or received to a second system. Thus, by requiring authentication at the *intermediate transfer system*, Beged-

Dov teaches away from verification at the second system as applicants' claim in claims 18 and 32 of record or as amended herein. As a result, it is respectfully submitted that Beged-Dov cannot be said to explicitly or inherently disclose *the first computer executable agent facilitates copying of clipboard data from the first computing system to the second computing system by encapsulating the clipboard data and transmitting the encapsulated clipboard data to the second computer executable agent, which second computer executable agent verifies that the clipboard data can be copied to the second computing system* as recited in amended dependent claim 18. Accordingly, dependent claim 18 is believed to be allowable for at least this reason. Additionally, dependent claim 18 is believed to be allowable for at least the reason that Beged-Dov fails to cure the deficiencies of the root references Panasyuk and Kawamura as described above regarding independent claim 13.

In addition, regarding amended independent claim 32, the claim recites: *means for accessing a database of associations between the first system, at least a second system, and a user thereof to automatically facilitate control of the second system via the first system upon deployment of the second system proximate to the first system*. As described in arguments referring to independent claim 1, regarding cited column 1, lines 54-61, Panasyuk's description of two agents in communication without knowledge of the source of those windows cannot be said to expressly or inherently disclose this aspect of applicants' claimed invention.

Accordingly, independent claim 32 is believed to be allowable for at least this reason.

In response to these arguments, it is conceded that Panasyuk does not explicitly disclose that the local agent is communicatively coupled to an associations database comprising associations information between a user, the local system, and the remote system. Thus, it is contended that Kawamura provides this missing aspect. Applicants' representative respectfully disagrees. The citations to column 6, line 65 to column 7, line 6 and Column 32, lines 23-31 are offered to support the contentions that Kawamura discloses "means for accessing a database of associations between the first system, at least a second system. . ." See, e.g., Official Action dated July 10, 2008, numbered p. 14.

However, claim 32 clearly recites *means for accessing a database of associations between the first system, at least a second system, and a user thereof*. As discussed above regarding independent claim 1, Kawamura is silent regarding associations information of the user, and thus, Kawamura cannot be said to disclose an *means for accessing a database of*

associations between the first system, at least a second system, and a user thereof. Thus, independent claim 32 is believed to be allowable for at least this reason.

In addition, by requiring authentication at the *intermediate transfer system*, Beged-Dov teaches away from verification at the second system as applicants' claim in claims 18 and 32 of record or as amended herein. As a result, it is respectfully submitted that Beged-Dov cannot be said to explicitly or inherently disclose *means for automatically routing clipboard content from the first system to the at least a second system, the at least a second system including a second agent that verifies that the clipboard content can be received at the at least a second system* as recited in amended independent claim 32. Accordingly, independent claim 32 is believed to be allowable for at least this reason as described above regarding claim 18. Additionally, independent claim 32 is believed to be allowable for at least the reason that Beged-Dov fails to cure the deficiencies of the root references Panasyuk and Kawamura as described above regarding independent claim 1 and 13.

Reconsideration and withdrawal of the rejection of claims 18 and 32 under 35 U.S.C. § 103(a) is respectfully requested, at least, in view of the comments above.

VI. Rejection of Claims 26-31 Under 35 U.S.C. § 103(a)

Claims 26-31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Panasyuk et al. (US 6,437,803) in view of Beged-Dov et al. (US 6,983,328). Without conceding the propriety of the combination, reconsideration and withdrawal of the rejection is respectfully requested, at least because Beged-Dov alone, or in combination with Panasyuk does not disclose each and every limitation of applicants' claimed invention, nor does the combination render applicants' claimed invention obvious.

Regarding amended independent claim 26, the claim recites: *routing the clipboard data to the second computing system in response to a routing signal.* Examiner concedes that Panasyuk does not disclose "receiving clipboard data and switching clipboard data to a second computing system", regarding claim 26 of record in the Official Action dated July 10, 2008. Thus, Beged-Dov is relied upon to provide these missing aspects. However, Beged-Dov fails to cure the deficiencies of the root reference Panasyuk as described above regarding independent claims 1 and 13 in addition to failing to disclose that which it is cited for.

For example, column 3, line 63 to column 4, line 2, column 4, lines 30-50, column 5,

lines 17-18 and 36-49 are cited for support that Beged-Dov discloses such as aspects as claimed in amended claims 26 and 32. In contrast, Beged-Dov merely describes transfer of resource(s) from a source web service to a destination web service *via an intermediary trusted internet clipboard service by intercepting download and upload actions of a user in a web interface.* See, e.g., Abstract, Summary, Figure 1, etc. For example, Beged-Dov describes a method including intercepting a user's request, capturing information retrieved for the request, editing the recorded messages, and replaying the messages on an Internet clipboard server to effect the resource transfer.

However, Beged-Dov fails to explicitly or inherently disclose the claimed aspects of applicants' invention. For example, column 3, line 63 to column 4, line 2 is cited for support that Beged-Dov describes discloses *routing of clipboard data from the first system* and *routing the clipboard data to a second system in response to a routing signal.* However, as recited in claim 26, the first system corresponds to the local agent, whereas the second system receives the clipboard data. By requiring the clipboard data to be transferred to the internet clipboard service, Beged-Dov can be reasonably read as teaching away from *routing the clipboard data to the second computing system in response to a routing signal* as recited in claim 26 of record. For instance, while Beged-Dov requires log on and/or log off of associated source and destination web services, initiating and stopping copy functions, and so on, applicants' claimed invention clearly refers to the local system's (first system's) system clipboard.

In response to these arguments, it is contended that Beged-Dov discloses the routing of clipboard data between network-connected systems *via an internet clipboard service that is an intermediate transfer system, user authentication before access to clipboard data transfers.* See, e.g., Official Action dated July 10, 2008, numbered p. 4, item 3.3. Thus, it is contended that “[t]here is nothing in the claimed invention that discourages or discredits the usage of an intermediate system.” *Id.* Accordingly, it is concluded that “Beged-Dov does not teach away from the routing of clipboard data between network connected systems.” To support this conclusion, it is contended that the final result is the transfer of clipboard data between two network connected systems as per the claimed invention. *Id.* Column 3, line 63 to column 4, line 2, column 4, lines 30-50, and column 5, lines 17-18 and 36-49 are again cited for support that “Beged-Dov also discloses authentication of the user before usage of the network capable clipboard service.” *Id.*

Applicants' representative disagrees with such conclusions and submits that Beged-Dov fails to disclose these aspects of applicants' claimed invention in addition to teaching away from applicants' claimed invention for reasons described above regarding claims 18 and 32. Accordingly, independent claim 26, as well as associated dependent claims, are believed to be allowable for at least this reason. Additionally, independent claim 26, as well as associated dependent claims, are believed to be allowable for at least the reason that Beged-Dov fails to cure the deficiencies of the root references Panasyuk and Kawamura as described above regarding independent claims 1 and 13.

Reconsideration and withdrawal of the rejection of independent claims 26 (and associated dependent claims) under 35 U.S.C. § 103(a) is respectfully requested, at least, in view of the comments above.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP501US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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